

WA-Trans Partners Meeting Notes 9-March-2005

Attendees:

Participant	Association	Location Attended
Tami Griffin	WSDoT - WA-Trans	Olympia
Mark L. Hotz	WSDoT - WA-Trans	Olympia
Mark Finch	WSDoT - TDO	Olympia
Ron Cihon	WSDoT - Geo Services	Olympia
Michelle Blake	WSDoT - OIT	Olympia
John Shambaugh	WSDoT - Aviation	Olympia
Wendy Hawley	US Census Bureau	Olympia
Pat Whittaker	WSDoT - TDO	Olympia
Chris Madill	WA Traffic Safety Commission	Olympia
Susan Bagley	WSDoT - Rail	Olympia
John Joseph	ESRI	Olympia
Terry Bartlett	Marshall GIS	Olympia
Lee Case	USGS	Olympia
Kayla Kruse	SRTC	Spokane
Terry Holland	Whatcom County Public Works	Bellingham
Perry Rice	Whatcom County	Bellingham
Matt Wisen	WSDoT - Planning - NC Region	Wenatchee
Cecelia Lloyd	Whatcom County Public Works	Bellingham
Cathy Udenberg	Walla Walla County	Yakima
Reilly Love	Love Consulting	Seattle

Facilitator and Note Taker: Tami Griffin

Agenda:

I.	Introductions	Tami	9:00 a.m.
II.	Status Report (Participants, Communication)	Tami	9:10 a.m.
III.	Pilot Projects Update	Tami	9:20 a.m.
IV.	Steering Committee Update	Tami	9:50 a.m.
V.	Break		10:00 a.m.
VI.	Standards and WA-Trans Data Model		10:10 a.m.
VII.	Update US Bureau of Census MTAIP (Tiger/MAF Modernization)	Mark Hotz Wendy Hawley	11:00 a.m.
VIII.	USGS National Map Update	TBA	11:20 a.m.
IX.	Review Action Items and Close	Tami	11:45 a.m.

After round the table and regions introductions, it was announced that the next Partner's meeting would take place at:

- September 21, 2005
- 9 a.m. - noon
- 310 Maple Park Ave. SE in Olympia
- Room 2F22 (Shaman Room)
- Video-conferencing at WSDOT Regional Office
- Shoreline, Vancouver, Yakima, Wenatchee, Spokane
- Additional locations if arranged in advance

Status Report:

New participants were announced:

- New Assistant Project Manager - Mark Hotz,
- Executive Sponsor - Paula Hammond; WSDOT Chief of Staff,
- City of Leavenworth, City of Chelan,
- Whatcom County Public Works,
- Spokane County Regional Transportation Council,
- Love GIS Consulting,
- Department of Information Services.

Milestones that were met:

- Completed Data Model and Standards,
- Completed Department of Information Services "Risk/Severity" analysis,
- Completed Requirements for Translator,
- Completed High Level Tool Description for Transportation Pooled Fund Project (WA/OR Pilots),
- Completed first draft charter/plan for Puget Sound Pilot.

Spatial data translator requirements:

- Funded through a grant from Microsoft for customers with an enterprise agreement with work done by B-First Solutions, Inc.
- Used to define what the translator needs to do so we can write a Request for Proposal (RFP).
- The goal of the RFP is to purchase and customize a translator for WA-Trans, OR All-Roads and other states that participate in the Transportation Pooled Research Project.
- Provide a bidirectional data translator that operates as a filter for data from a local format and schema into the WA-Trans format (and

- others) and from the WA-Trans format and schema back into local format and schema and federal spatial transportation exchange standards.
- Provide components that enable the users to manipulate the imported or exported data into the desired redefinition as necessary. Save that process for each user.
- Provide a data prescreening process to ensure minimum data standards compliance,
- Provide users with the ability to view logging and transactions to ensure data validation and the ability to manually augment the data correction.
- Provide a method to detect new or changed data
- The ultimate software solution shall provide tools and processes to automatically add the minimum metadata (through elicitation of users) to WA-Trans.

Pilot Projects Update:

The Puget Sound Pilot:

- **Phase I**
- Funded by NSDI CAP Grant.
- Partners with Pierce and King County and others who may wish to share data.
- Puget Sound Regional Council will perform GIS work.
- Translator will be completed, tested and used.
- Data will be provided to The National Map served from Menlo Park, CA by the USGS.
- We are looking for groups who would like to test and document the usability of the resulting data.
- First draft project charter/plan complete.
- **Phase II**
- Proposed for funding by Puget Sound Regional Council.
- Partners with Snohomish and Kitsap County and others who may wish to share data.
- Puget Sound Regional Council will perform GIS work.
- We will be looking for groups who would like to test and document the usability of the results.
- Depends upon funding.

Puget Sound Pilot Timeline:

- November / December 2004 - Complete standards and translator requirements,
- January / February 2005 - Develop pilot charter, schedule, budget, establish pilot advisory team,
- March 2005 - set up advisory group meetings, write RFP,
- April / May 2005 - Vendor demonstrations of translators. Buy or build decision, begin customization or build of translator.
- June - August 2005 - complete customization, begin data integration and translator test.
- September - October 2005 - translate data for The National Map.
- November / December 2005 - pilot project completion, lessons learned.

OR/WA Pooled Fund Pilot Proposal:

Project and Funding Received:

- Phase 1 - Benton, Franklin and Walla Walla Counties in Washington and Morrow and Umatilla Counties in Oregon
- Phase 2 - Clark and Cowlitz Counties in Washington and Columbia and Multnomah Counties in Oregon

Software focused:

- Complete any work on Translator needed,
- Internet interfaces for input and output,
- Data Integration,
- Quality Assurance and Quality Control,
- Location Referencing Management

TPR Participation Options:

- WSDOT is Lead (\$30,000 this next year),
- ODOT has contributed (\$35,000 this next year),
- We can partner with other DOTs, FHWA, Local Governments, Universities and Colleges and Private Companies.
- Each commits to some level of contribution and then gets the share in the results (\$10K - \$30K annually for 3 years).
- I have more detailed information documented if you are interested.

More about WA-Trans:

- WA-Trans does not include: concepts such as paths, networks, etc. However, the data is structured to be input to third party software, which can turn it into networks.
- WA-Trans does NOT include all data WSDOT needs about the transportation system, but does have keys that allow attaching the additional data to it.

Process and Policies:

- Agreement Points, how should we establish them, and how formal should they be?
- Versioning - create a "snapshot" every year.
- Update Cycles - notifications are passive (on website or in metadata). Data sharing agreements drive update cycles with data providers.
- Looking at who coordinates data for an area. Considering having the county as coordinator where that is agreeable to all, otherwise we will work individually with each organization.
- Working on sample data sharing agreements. We will work pilots with memorandum of understanding and work to develop data sharing agreements during the pilot.

The Next Steps:

- Continue to work on policies and processes,
- RFP for Puget Sound Pilot and begin work,
- Solicit partners for Transportation Pooled Fund Project and begin work,
- Complete Return on Investment and Individual Case Studies for Cost Benefit Analysis of project,
- Continue to seek funding.

Steering Committee Update:

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| • Tareq Al-zeer - WSDOT | • Jerry Harless - PSRC |
| • Roland Behee - Community Transit | • Wendy Hawley - US Bureau of Census |
| • Dave Cullom - WUTC | • Dave Rideout - Spokane County Engineers |
| • Dan Dickson - CRAB | • Sam Bardelson - USGS |
| • Tim Young - WSDFW | • Ian Von-Essen - E-911 |
| • Elizabeth Stratton - WSDOT "Freight" | • Chuck Buzzard - Pierce County |
| • Jason Guthrie - Lincoln County | • David Koch - DIS |
| | • Cathv Udenbera - Walla Walla County |

WA-Trans Standards:

Work Completed So Far:

- Cost Benefit Analysis for WSDOT business areas (2 in progress)
- Data Model and Standards
- Translator Requirements
- Two Pilots in Progress - one underway in early stages and the other one partially funded to begin late spring.

Scope of the Data Model:

- WA-Trans Data Model and Standards include:
 - ▶ Roads
 - ▶ Rail
 - ▶ Ferries
 - ▶ Aviation
 - ▶ Non-motorized Transportation
 - ▶ Marine and River Ports will be added

More Design Considerations:

- WA-Trans is NOT a GIS, but a data source for use in GIS
- Address-geocoding and geocoding in general were determined to be the highest priority business need for WA-Trans.
- Accurate centerline data a very high priority.
- Update cycles for local governments are generally frequent and lead to accurate address and centerline information.

Segments and Points:

- The WA-Trans Model is based upon segments and points to represent the transportation features.
 - ▶ Segments: roads, runways, ferry routes, ferry staging areas
 - ▶ Points: intersections and features (roads, roads and railroads, ferry terminals, airport terminals), begin and end of segments.

Characteristics of Segments and Points:

- Multiple descriptions are allowed of segments. This supports different road names by different levels of government for the same feature.

- Segment and point identifiers are perpetual. They are retired when the road changes so we can historically reproduce that feature at any specific date.
- Descriptions are also perpetual and can retire independent of segments and points.

Event Data:

- Event data for roads includes:
 - ▶ Surface Information
 - ▶ HOV Information
 - ▶ Speed Limits
 - ▶ Number of Lanes
 - ▶ Federal Functional Classification
 - ▶ Structures
 - ▶ Non-motorized use
 - ▶ Indian reservation road information (still to be added).

Business Rules:

- For each mode, segments break at "at-grade" intersections and between jurisdictional boundaries.
- Multi-modal segments using the same "space" will be in separate geometries with coincident locations.
- Any edits, joins, or splits of a segment or segment point geometry forces an update of all associated events tables.

Questions were presented addressed to the WA-Trans Project Manager:

Terry Holland in Bellingham:

Is there a target date for the WA-Trans spatial data translator? Is there a translator available or will we be developing from scratch.

ANS: There is not an exact target date for the spatial data translator, although the RFP for the acquisition or development of such translator should be put out to tender soon, hopefully by June. We are not sure exactly what is available for such a translator. There are translators available, but we have to let the developers who bid on the RFP to present to us what they feel is the best solution, and why. It could be a commercially available spatial data translator that we will need to be customized to suit our needs, or it could be technology that the developer will create from scratch.

Cathy Udenberg in Yakima:

Will metadata be translated back from the WA-Trans format?

ANS: Yes. It is planned that the spatial data translator we either purchase or develop will be able to handle both the metadata that will be entered by the data provider, and the data user who ultimately downloads the data to their organization.

Riley Love in Seattle arrived (09:28)

Cathy Udenberg in Yakima: Are there going to be requirements for data accuracy?

ANS: There will be minimum requirements for data accuracy and precision, however, our goal is to obtain the "best available data", and if that means that the data we have to acquire is not quite up to the standards of other data acquired, then we will use it, and worry about its integrity and improve its quality at a later date.

Reilly in Seattle:

Is there a need for conflation tools when data is going to be imported from many different data sources throughout the state?

ANS: Yes. This is something that will either be a part of our spatial data translator, or it will be the required duty of a technician who is responsible for incorporating and integrating the acquired data into WA-Trans data sets.

Cathy Udenberg in Yakima:

Are we including transportation modeling?

ANS: Yes. We are finding that the value builds between processes.

Reilly in Seattle:

In Seattle are we going to have name standardization? This is a big issue across boundaries. Is the translator going to accommodate this?

ANS: Yes. A requirement will be the standardizing of road names. We have also looked at standardized suffixes and prefixes. The translator can

facilitate these standards, but we haven't talked about it in detail yet. For geocoding this is an issue, but it is expected that the translator will be able to accommodate this necessity.

Cathy Udenberg in Yakima:

Have you used NINA Standards for addresses? Cathy wants us to use the NINA standards.

Reilly in Seattle:

Are we including turn restrictions?

ANS: No. I believe the reasoning is that this is something that can be added by a GIS when modeling road networks, and this project is not creating a GIS.

Cathy Udenberg in Yakima:

What constitutes legal authority?

ANS: That depends on the provider and their opinion of that. This is also something that will be better defined in each data sharing agreement.

Michelle Blake in Olympia:

Referring to pg. 15 spatial data rules. Segments will provide between 2 nodes and no vertices. We don't remember the source of that rule. Mark Hotz will follow up on this.

Mark Hotz in Olympia (follow up):

The actual rule now stipulates that one segment will comprise of two nodes, and as many vertices as needed to properly represent the line.

Cathy Udenberg in Yakima:

Do we /can we reference FGDC components of the model?

ANS: Maybe Brian Jones currently can.

Cathy Udenberg in Yakima:

Conflation tools. Have we dealt with the concept of data? We may need tools to help remove too much segmentation.

ANS: Not yet.

Cathy Udenberg in Yakima:

Are we hoping to have a recommended set of standards?

ANS: Not really because we put a lot of time into developing business needs and they may differ from a local government's needs. But they can be a basis for their work.

Wendy Hawley - Update US Bureau of Census MTAIP (Tiger/MAF Modernization)

Complete by fy2008.

- Key to census for WA-Trans -
- If WA-Trans existed it would be first source for census.
- Census may now be including partial jurisdiction files from locals and using spatially enhanced data based on files provided by local government.
- 412 Counties are spatially enhanced with feature level metadata with source of the feature. Can download shape files. Put out twice yearly. Thurston County should come out in the next batch and Island County.
- Trying to listen to partners, make coordination for automated.

Lee Case - USGS National Map Update

- Trying to figure out how to set up partnership offices.
- Measuring Geospatial investments
- Some question about DHS taking over lead of coordinating geospatial data for the Federal Government.
 - ▶ Are you coming up with standards or guidelines for collaborative agreements for stakeholders?
ANS: Working it through NSGIC and other organizations.
 - ▶ Are there going to be any changes to transportation standards.
ANS: Doesn't seem like it. After they are approved they will be ANSI certified.
- Moving towards data producer of last resort and that may change role of mapping centers.
- Partner organizations add completeness to TNM.
- Target June 2005.
- Sam will be liason for NSDI.
- Collecting imagery for Tacoma - Seattle, Olympia, and Spokane Urban areas.
- Plans in Oregon for NAIP imagery.
- LIDAR being collected on lower Columbia basin.